Amendments claims on 07/12/06 (07/17/06) (TE20060526) Marked up version

Claims

1 (amended) - Optical device comprising a mirror and a device actuating the mirror,

characterized in that the mirror and the actuating device are <u>free</u> independent concave membranes (called membranous mirror and actuating membrane) without contact between them, or with other device, and tied by their central parts to the telescope.

Claims 14, 18, 19, 44 canceled (Current work 10/20/08)

45 (new) - Telescope optical device according to claim 1,

characterized in that there are two levels of control to give at the free membranous mirror a perfect shape :

In a first level, an aproximate shape is given to the free actuating membrane by interaction of a magnetic field tied to the telescope with magnetic fields generated by actuating membrane;

in a second level, a perfect form is given to the free membranous mirror by electrostatic interaction of the free actuating membrane with the free membranous mirror.

46 (new) - Telescope optical device according to claim 1,

characterized in that by use of the capacitive coupling between the conductive layer of the mirror and specific electrodes of the actuating membrane, the spread electronic integrated in the actuating membrane acts for the self-stabilisation of the shape of the system mirror-actuating membrane.

47 (new - 15 third amended) - Optical device according to claim 1.

characterized in that, for its folding, the concave membranous mirror is deformed by the formation of concentric circular ondulations obtained by a succession of centered distorsions alternately concave and convex, altering the pure concave surface of the membraneous mirror in a circular surface comprising a series of circular centered wawes whose the vertical crest to crest distance is so small as one wishes, in view of the number of waves so great as one wishes.

and in that the thin almost flat object so obtained is wound onto itself, forming a cylinder.

48 (new - 15 third amended) Optical device according to claim 1,

characterized in that, for its folding, the concave membranous actuating membrane is deformed by the formation of concentric circular ondulations obtained by a succession of centered distorsions alternately concave and convex, altering the pure concave surface of the actuating membrane in a circular surface comprising a series of circular centered wawes whose the vertical crest to crest distance is so small as one wishes, in view of the number of waves so great as one wishes.

and in that the thin almost flat object so obtained is wound onto itself, forming a cylinder.

Clean version under 37CFR 1.121(c) - Claim 15 not canceled 47 (new - 15 third amended) - 48 (new - 15 third amended) 07/12/06 CLAIMS (TE20060526)

1 (twice amended)- Telescope optical device comprising a mirror and a device actuating the mirror.

characterized in that the mirror and the actuating device are free concave membranes without contact between them, or with other device, and tied by their central parts to the telescope.

- 14 (canceled), 18 (canceled), 19 (canceled), 44 (canceled)
- 45 (new) Telescope optical device according to claim 1,

characterized in that there are two levels of control to give at the free membranous mirror a perfect shape :

In a first level, an aproximate shape is given to the free actuating membrane by interaction of a magnetic field tied to the telescope with magnetic fields generated by actuating membrane;

in a second level, a perfect form is given to the free membranous mirror by electrostatic interaction of the free actuating membrane with the free membranous mirror.

46 (new) - Telescope optical device according to claim 1,

characterized in that by use of the capacitive coupling between the conductive layer of the mirror and specific electrodes of the actuating membrane, the spread electronic integrated in the actuating membrane acts for the self-stabilisation of the shape of the system mirror-actuating membrane.

47 (new - 15 third amended) - Optical device according to claim 1,

characterized in that, for its folding, the concave membranous mirror is deformed by the formation of concentric circular ondulations obtained by a succession of centered distorsions alternately concave and convex, altering the pure concave surface of the membraneous mirror in a circular surface comprising a series of circular centered wawes whose the vertical crest to crest distance is so small as one wishes, in view of the number of waves so great as one wishes.

and in that the thin almost flat object so obtained is wound onto itself, forming a cylinder.

48 (new - 15 third amended) Optical device according to claim 1,

characterized in that, for its folding, the concave membranous actuating membrane is deformed by the formation of concentric circular ondulations obtained by a succession of centered distorsions alternately concave and convex, altering the pure concave surface of the actuating membrane in a circular surface comprising a series of circular centered wawes whose the vertical crest to crest distance is so small as one wishes, in view of the number of waves so great as one wishes.

and in that the thin almost flat object so obtained is wound onto itself, forming a cylinder.

Clean version under 37CFR 1.121(c) - Claim 15 canceled

47 (new) - 48 (new)

07/12/06 CLAIMS (TE20060526)

1 (twice amended)- Telescope optical device comprising a mirror and a device actuating the mirror,

characterized in that the mirror and the actuating device are free concave membranes without contact between them, or with other device, and tied by their central parts to the telescope.

14 (canceled), 15 (canceled), 18 (canceled), 19 (canceled), 44 (canceled)

45 (new) - Telescope optical device according to claim 1,

characterized in that there are two levels of control to give at the free membranous mirror a perfect shape :

In a first level, an aproximate shape is given to the free actuating membrane by interaction of a magnetic field tied to the telescope with magnetic fields generated by actuating membrane;

in a second level, a perfect form is given to the free membranous mirror by electrostatic interaction of the free actuating membrane with the free membranous mirror.

46 (new) - Telescope optical device according to claim 1,

characterized in that by use of the capacitive coupling between the conductive layer of the mirror and specific electrodes of the actuating membrane, the spread electronic integrated in the actuating membrane acts for the self-stabilisation of the shape of the system mirror-actuating membrane.

47 (new) - Optical device according to claim 1,

characterized in that, for its folding, the concave membranous mirror is deformed by the formation of concentric circular ondulations obtained by a succession of centered distorsions alternately concave and convex, altering the pure concave surface of the membraneous mirror in a circular surface comprising a series of circular centered wawes whose the vertical crest to crest distance is so small as one wishes, in view of the number of waves so great as one wishes.

and in that the thin almost flat object so obtained is wound onto itself, forming a cylinder.

48 (new) Optical device according to claim 1,

characterized in that, for its folding, the concave membranous actuating membrane is deformed by the formation of concentric circular ondulations obtained by a succession of centered distorsions alternately concave and convex, altering the pure concave surface of the actuating membrane in a circular surface comprising a series of circular centered wawes whose the vertical crest to crest distance is so small as one wishes, in view of the number of waves so great as one wishes.

and in that the thin almost flat object so obtained is wound onto itself, forming a cylinder.

Mistake in the numbering of the claims.

The number 45, with the status of new, has soon be used in entered claims listings filed on 06/28/01, with the same status of new, but for an other object.

This claim 45 (new) does not seem to have been canceled in claims listing filed after 06/28/01, on 07/12/06, with others claims 14, 18, 19 and 44, in marked up version (see page 6)

It has been canceled by a CURRENT amendment page 5

So, for correction, the second claims 45, and claims 46, 47, 48 and 49 will be canceled, and the numbering will restart from new claim 50 to new claim 53, under 37 CFR 1.121(c)(5).